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April 30, 2008

MEMORANDUM

TO: Power Committee

FROM: Terry Morlan

SUBJECT: Discussion of Council Fuel Price Forecasts

This agenda item will give Power Committee members a chance to see what the Council's current fuel price forecasts are and how they compare to recent actual prices and forecasts by other organizations. The presentation that is attached will provide this information and also clarify how the forecast ranges enter into the development of a power plan portfolio of resources.

In summary, early in 2008, fuels (natural gas, oil, and coal) increased rapidly in price along with other commodities, including metals and food. There are many factors that could help explain this increase, but the magnitude of the increase is still surprising. Among the most often cited causes are the declining value of the dollar, rapid growth in China and India, and the shifting of investment money into commodity markets.

We will be exploring the long-term implications of this as we develop the Sixth Power Plan. Most other forecasters expect these high prices to moderate over the next few years, as has typically been the case with commodity cycles. How far prices might moderate and the timing of that moderation is highly uncertain. It is important to understand that the Council's portfolio analysis reflects extreme natural gas price volatility adequate to cover events like this year's price increase.

We will meet with the Council's Natural Gas Advisory Committee as we develop revised forecasts of fuel prices for the Sixth Power Plan. We will also review new forecasts that are released and that we have access to. Currently short and long-term forecasts do not seem inconsistent with the Council's revised fuel price forecasts that were adopted in September 2007. However, given that the rapid escalation has been very recent, many forecasts that are currently available have not reflected these increases.

NG Price Forecast Comparison

Power Committee
May 13, 2008
Walla Walla, WA



How Council Fuel Price Forecasts are Developed

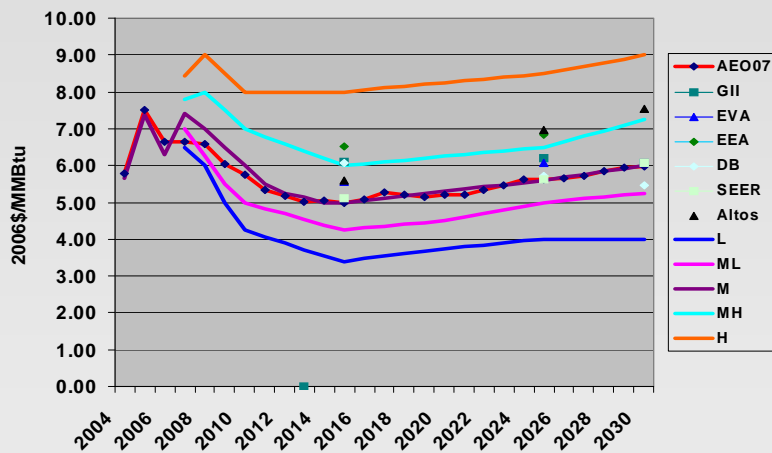
- Staff analysis of historical trends, market assessments, and other long-term forecasts
- Discuss proposed assumptions with Natural Gas Advisory Committee
- Public comment on proposed assumptions
- But, long-term trend forecasts are not all that goes into the Council's Power Plan



Natural Gas

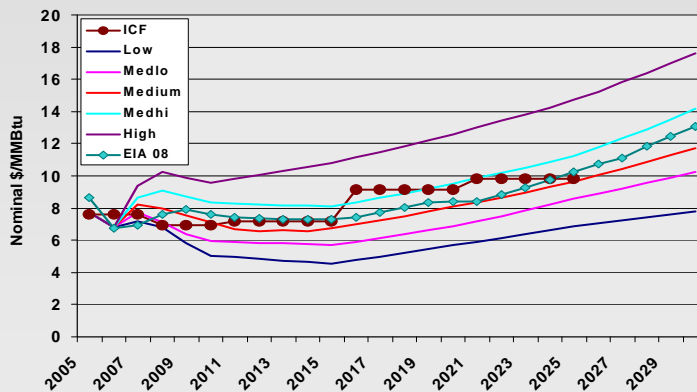


Revised Natural Gas Price Compared to Other Forecasts, Then



Comparison to More Recent Forecasts

Council Compared to ICF and EIA
Henry Hub Natural Gas Price Forecasts

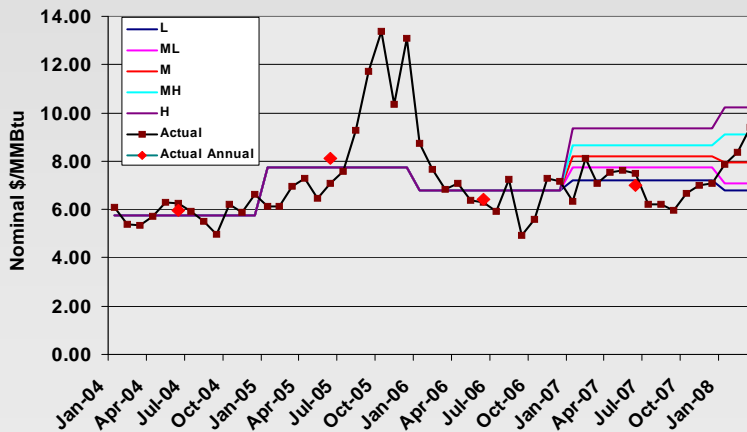


Sources:
EIA AEO 2008
ICF for WA EFSEC Nov 2007



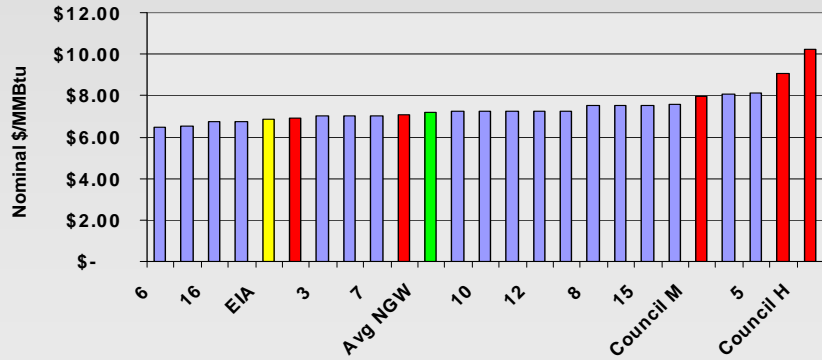
Actual 2007 Price is at Council's Low Forecast

Henry Hub Forecast Compared to Actual Prices



Comparison to Short-Term Forecasts for 2008 Prices

Revised FC 2008 Comparison

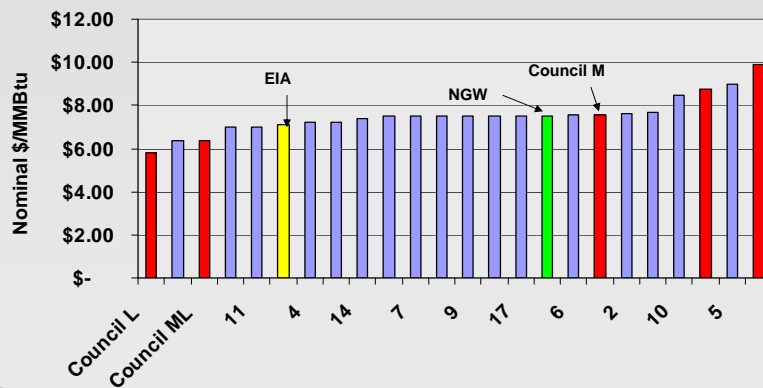


Source:
Natural Gas
Week 1/28/08



Comparison to Short-Term Forecasts for 2009 Prices

Revised FC 2009 Comparison

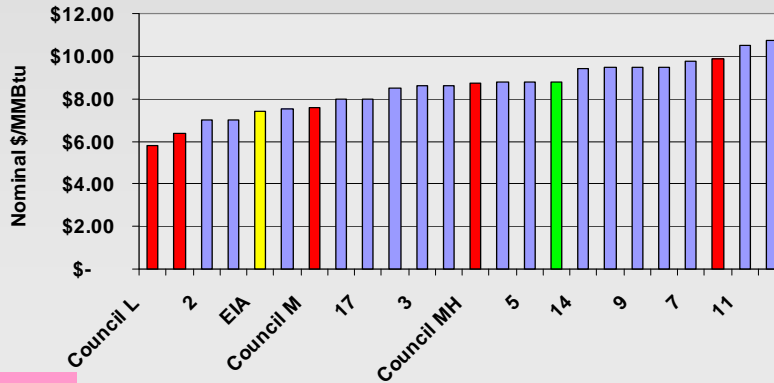


Source:
Natural Gas
Week 1/28/08



Comparison to Short-Term Forecasts for 2009 Prices

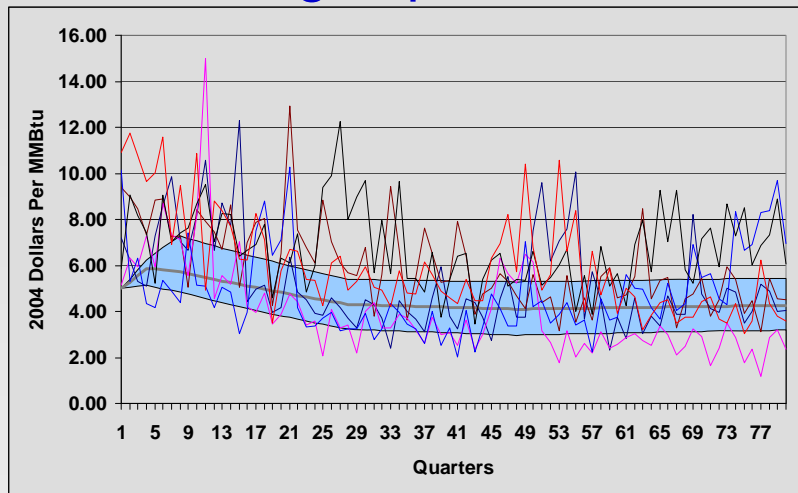
Revised FC 2009 Comparison



Source:
Natural Gas
Week 4/28/08

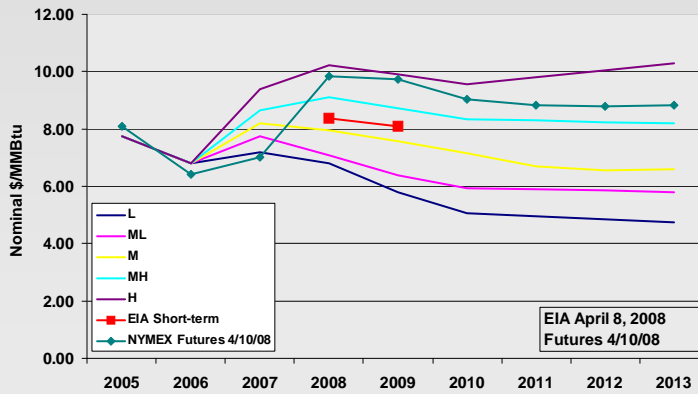


Example risk treatment – natural gas prices

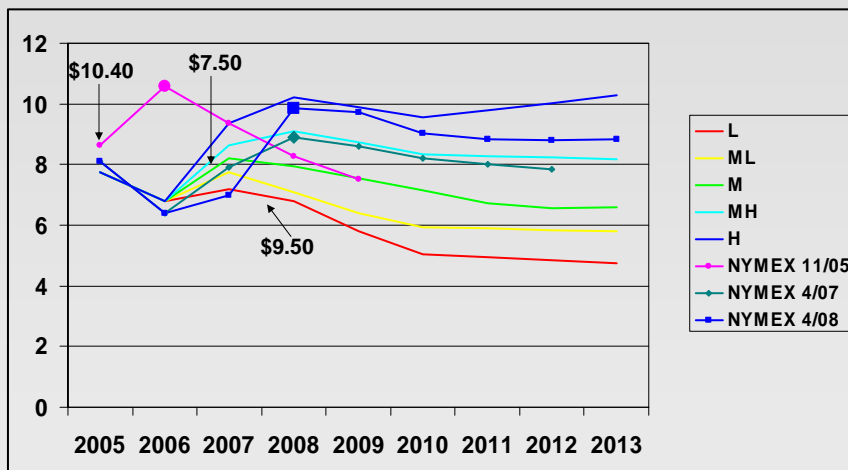


Comparison to Futures and EIA Short-Term Forecast

Council Revised Henry Hub NG Price Compared to EIA Short Term Forecast and Futures Market



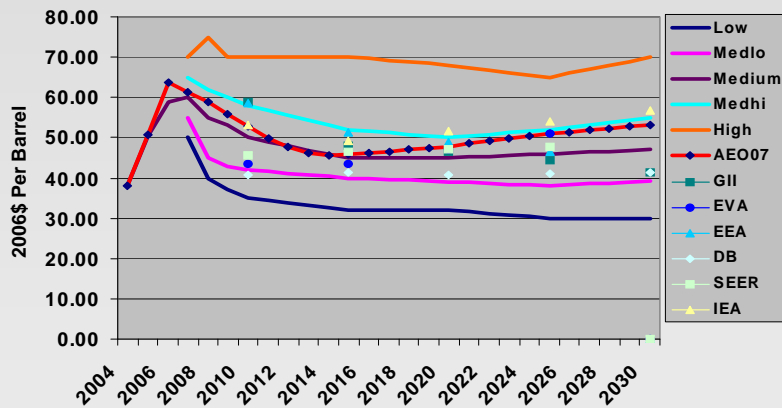
Futures Prices Reflect Current Prices



World Oil Prices

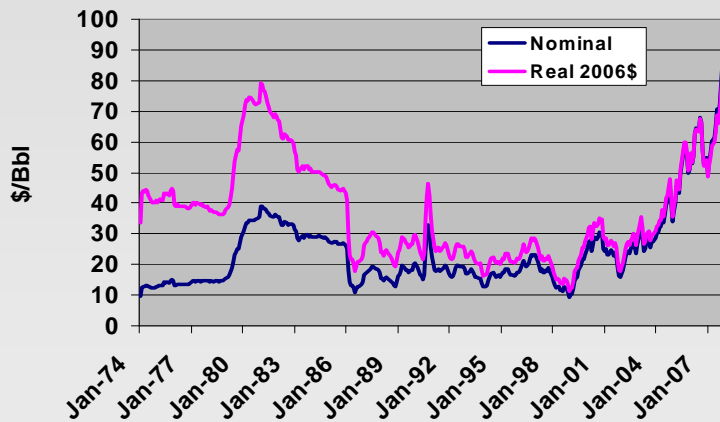


Revised Oil Price Forecast Compared to Others - Then

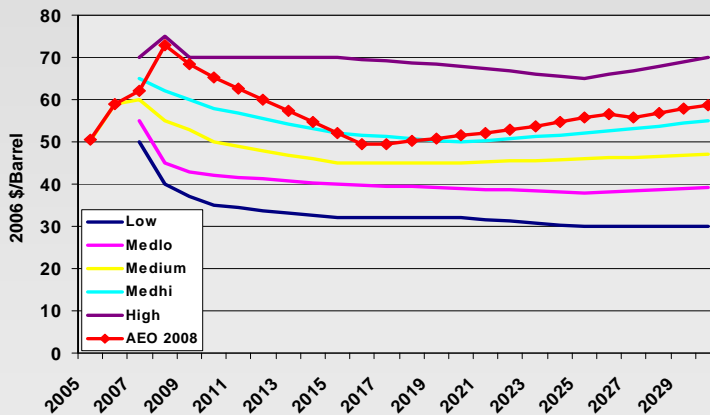


Long-Term Perspective on World Oil Prices

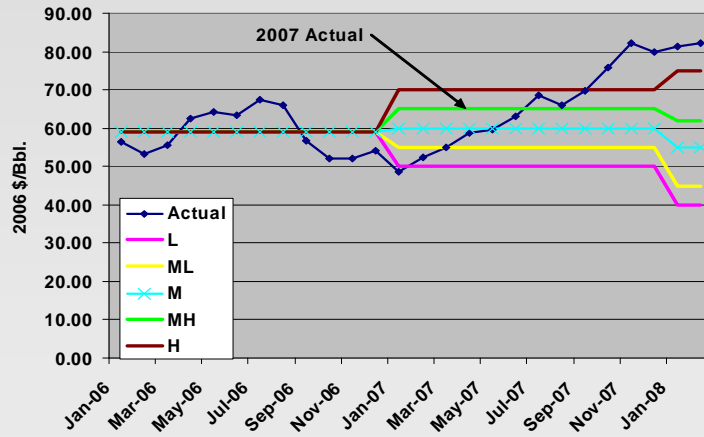
Refiners Acquisition Cost of Imported Crude Oil



EIA 2008 Oil Price Forecast Compared to Council



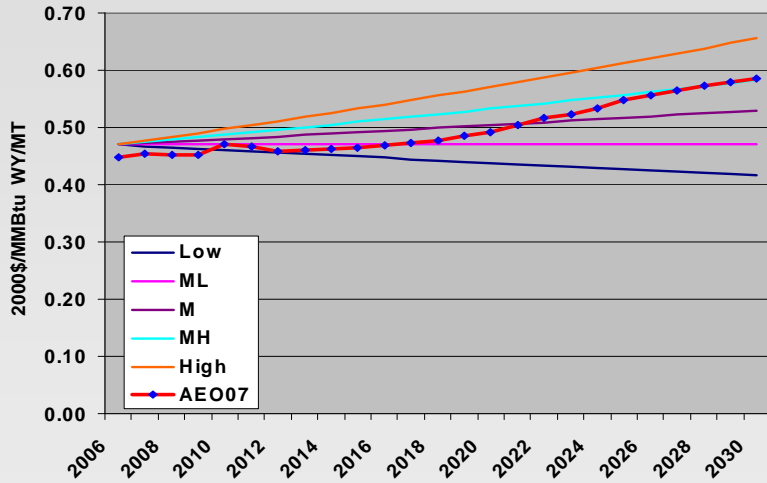
Recent Monthly World Oil Prices Compared to Council Range



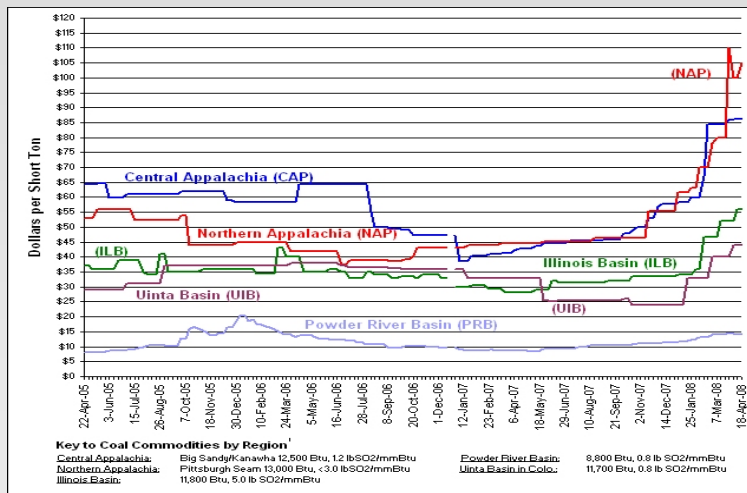
Coal Prices



Council Coal Price Forecast Compared to EIA 2007



Recent Coal Price Trends



Source: Energy Information Administration

